

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	Ó	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,271		06/13/2002	Shane Willard Nickson	22748/1	2417
21710	7590	05/04/2004		EXAMINER	
BROWN, RUDNICK, BERLACK & ISRAELS, LLP.				PHAM, HUONG Q	
BOX IP, 18TH FLOOR ONE FINANCIAL CENTER			ART UNIT	PAPER NUMBER	
BOSTON	BOSTON, MA 02111			3764	
				DATE MAILED: 05/04/2004	ŀ

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13, 17-18 are rejected under 35 U.S.C. 103(a) as obvious over Hall in view of the publication WO 95/31950. As for claim 13, Hall shows the claimed feature of claims 13 including a strapping member 14, an anterior longitudinal stiffener 10, a strut 30 (32, 36, 34), a sole plate 40. Note that Hall teaches that "When desire, the shape or thickness of the yoke or stirrup can be controlled to control the amount of flexion between the foot base and the leg support (column 3, lines 31-34), and "... a unitary construction permitting flexure of the foot relative to the ankle without the use of hinged members and the like" (column 3, lines 55-57). Thus, Hall teaches that the thickness or shape of the strut 30 (32, 36, 34) can be varied in order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40. Note that the brace of Hall is made of thermoplastic material. While it is not clear what type of thermoplastic material the brace of Hall is made from, the publication WO 95/31950 teaches a joint orthosis with a strapping member 1, joined reinforcement elements 2A, 2B made of reinforced resin materials which can be applied to an ankle joint (Page 1, lines 15-17; page 2, lines 35, 36). In view of this teaching of the publication WO 95/31950, it would

have been obvious to an ordinary skill in the art at the time the invention was made to use a reinforced resin material for the brace of Hall in order to make a light and strong orthopedic brace. Note that "rigid" is a relative term. Note that Hall teaches that the thickness or shape of the strut 30 (32, 36, 34) can be varied in order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40. In order to achieve the desired amount of flexion between the anterior longitudinal stiffener 10 and the foot base 40, by varying the thickness of the strut 30 (32, 36, 34), the strut 30 (32, 36, 34) can be "resiliently and flexibly configurable" as recited, and the anterior longitudinal stiffener 10 can be "inflexibly rigid" (compared to the strut). Also, note that the strut 30 of Hall "extending to the sole plate at an outside thereof, and anterior of a position of the ankle". As for claim 17, note the strap 18 of Hall. Note that the provision of plurality of straps for securing a brace to the leg of a wearer is very wellknown in the art, and it would have been obvious to an ordinary skill in the art at the time the invention was made to provide more than one strap for the brace of Hall in order to firmly secure the brace to the leg of a wearer. As for claim 18, note that the strapping of Hall is made of thermoplastic material, and note that "soft" is a relative term. A material which is "soft" to one person may be considered to be "hard" to another person.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall as applied to claims 13, 17-18 above, and further in view of Willner et al. While Hall does not mention about a sole plate with different portions having different strength and flexibility, Willner et al teaches a footplate 5 with this structure. In view of the teaching of Willner et al, it would have been

obvious to an ordinary skill in the art at the time the invention was made to provide the foot pad 40 of Hall with different portions having different strength and flexibility in order to allow flexion of the foot and promote a more natural gait.

Claims 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of DeToro and/or DiBenedetto. Note that DeToro and DiBenedetto teach a channel with an opening for the stiffener to allow length adjustment for the brace. In view of the teaching of DeToro and/or DiBenedetto, it would have been obvious to an ordinary skill in the art at the time the invention was made to provide a channel and an opening for the brace of Hall in order to provide length adjustment and good fit. The provision of a channel to provide length adjustment for a brace and therefore providing a good fitting for a wearer is well known in the art, and therefore is not patentable over prior art. As for claim 22, note that the phrase "...said anterior....is longitudinal movable...." is only a functional statement without any positive recitation of necessary structure to support this recited function.

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huong Q. Pham whose telephone number is (703) 305-5129. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (703) 308 - 2698. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

May 1, 2004

NICHOLAS D. LUCCHESI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700